

Cocoon.—Thin, almost papery, of dark brown silk, single, but with some loose silk without; elliptical, less definite in shape than in *Clisiocampa*, the ends thinner than the central portion. Size 35 x 15 mm.

Pupa.—Robust, the abdomen large, thicker than the thorax, slightly curved ventrally, the anal rounded, pilose, without cremaster, three moveable incisures, viz. 4-5, 5-6, 6-7th abdominal segments (corresponding to joints 8-9, 9-10, 10-11 of the larva) the other incisures behind the 8th abdominal segment distinct, but fixed. Spiracles large, distinct, present on abdominal segments 2 to 8. Cases smooth, compact, firmly united, the joinings marked by darker lines; the leg cases reach to the end of the third abdominal, wing cases to middle of the fourth, antennae cases opposite the end of the fourth segment. Head and thorax pilose, abdomen less distinctly so; cases smooth. Color light reddish brown, the incisures, spiracles and sutures darker. Length 25 mm., width 10 mm.

LITERATURE ON DEFENSIVE OR REPUGNATORIAL GLANDS OF INSECTS.

BY A. S. PACKARD.

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